EPI Update for Friday, February 25, 2005 Center For Acute Disease Epidemiology Iowa Department of Public Health

Items for this week's EPI Update include:

- Influenza Update
- Avian Flu
- HIV Health Alert
- American Heart Month

Influenza Update

For the past four weeks, Iowa has remained at widespread influenza activity. This increase in flu activity level is due to increased influenza-like illness that our sentinel providers have reported, numerous outbreaks within Iowa long-term care facilities, and numerous schools reporting absentee levels exceeding 10 percent with students reporting different types of illness including influenza, GI illness, and strep throat. Preliminary data shows influenza activity peaking in the state in week 6, which is the week ending February 12, 2005. This may change as IDPH receives more data. In Iowa, of the 201 positive influenza isolates University Hygienic Laboratory (UHL) has reported, 86 percent are Influenza A viruses and 14 percent are Influenza B. Nationally, of the positive influenza viruses, 85 percent have been Influenza A viruses and 15 percent have been Influenza B viruses. IDPH and UHL have not received results back from the CDC on Iowa influenza isolates sent by UHL for antigenic characterization. Nationally, of the Influenza A (H3N2) isolates that have been characterized, 55 percent were characterized as antigenically similar to A/Wyoming/3/2003, which is the A/Fujian/411/2002-like (H3N2) component of the 2004-05 influenza vaccine. The other 45 percent appear to be closely related to a A/California/7/2004 (H3N2), a strain that is being considered for next year's vaccine.

Avian Flu

Earlier this week Dr. Julie Gerberding, Director of the Centers for Disease Control and Prevention, stated that she regarded avian flu as the world's number one threat.

What is avian flu? Avian flu also known as "bird flu" is the strain of Influenza A that infects birds. These strains of influenza are described as high pathogenic or low pathogenic. A high pathogenic strain will kill 90 to 100 percent of the birds that it infects, whereas a low pathogenic strain causes less severe or no illness in the birds. Wild birds are a natural host of all influenza A viruses and usually do not become ill, however when domesticated poultry such as turkeys and chickens become infected it can cause severe illness and most will die. Infected birds shed the virus through saliva, nasal secretions and feces. The virus can also be transmitted from cages, feed, and clothing that has come into contact with secretions. If a susceptible bird comes into contact with any of these materials, they can become infected. Vaccine development is underway for

birds, however in birds that have been vaccinated the virus has still been able to replicate and shed in healthy birds.

Can avian flu be transmitted to humans? Avian influenza is usually transmitted in two ways to humans. The first route is directly from infected birds or from bird contaminated materials in the environment. The second route is from an intermediate host such as a pig (yes, pigs can get bird flu too). Although unusual, transmission from birds or from pigs to humans has occurred, but human-to-human transmission has not been sustained.

For more information on avian flu and personal protective measures go to:

http://www.cdc.gov/flu/avian/index.htm

For the article featuring Dr. Gerberding's remarks:

http://story.news.yahoo.com/news?tmpl=story&cid=571&e=8&u=/nm/health_flu_dc>

HIV Health Alert

New York City health officials announced that a patient rapidly developed AIDS shortly after being diagnosed with a rare, drug-resistant strain of the HIV virus. The patient was diagnosed in December with 3-DCR HIV, a strain that is resistant to three different classes of anti-retroviral medication.

Drug resistance is becoming increasingly common among patients who are undergoing treatment for HIV. However, cases of drug-resistant HIV in newly diagnosed, previously untreated patients are extremely rare.

The man appeared to have developed AIDS within two to three months after he was infected, or 20 months at the most. In most other cases, onset of AIDS occurs more than ten years after initial infection with HIV.

American Heart Month

In 1963, in recognition of the important ongoing fight against cardiovascular disease, the United States Congress approved a Resolution to allow the President to issue an annual proclamation designating February as "American Heart Month." Heart disease is the leading cause of death among Americans and is a leading cause of premature, permanent disability. Recognizing and responding promptly to heart attack symptoms and receiving prompt, appropriate care can prevent or limit heart damage.

Prevention remains key to reducing the burden and risk of heart disease. Factors which put people at increased risk for heart disease include: high blood pressure, high blood cholesterol, tobacco use, physical inactivity, poor nutrition, overweight/obesity, and having diabetes.

Symptoms of a Heart Attack

The National Heart Attack Alert Program notes these major signs of a heart attack:

- Chest discomfort. Most heart attacks involve discomfort in the center of the chest that lasts for more than a few minutes, or goes away and comes back. The discomfort can feel like uncomfortable pressure, squeezing, fullness, or pain.
- Discomfort in other areas of the upper body. Discomfort can include pain or discomfort in one or both arms, the back, neck, jaw, or stomach.
- Shortness of breath. This often comes along with chest discomfort, but it also can occur before chest discomfort.
- Other symptoms may include breaking out in a cold sweat, nausea, or lightheadedness.

If you think that you or someone you know is having a heart attack, you should call 911 immediately.

For more information go to CDC's website: http://www.cdc.gov/cvh/announcements/american heartmonth.htm>